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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/820,277	04/08/2004	Kimberly O. Cameron	PC10041C	8609	
28880 7	590 09/21/2005		EXAMINER		
WARNER-LAMBERT COMPANY			SEAMAN, D MARGARET M		
2800 PLYMOUTH RD ANN ARBOR, MI 48105			ART UNIT	PAPER NUMBER	
			1625	1625 DATE MAILED: 09/21/2005	
		,	DATE MAILED: 09/21/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)				
		10/820,277	CAMERON ET AL.				
		Examiner	Art Unit				
		D. Margaret Seaman	1625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHICH - Extens after S - If NO p - Failure Any re	RTENED STATUTORY PERIOD FOR REHEVER IS LONGER, FROM THE MAILING ions of time may be available under the provisions of 37 CF IX (6) MONTHS from the mailing date of this communication eriod for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by stoly received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNICATION R 1.136(a). In no event, however, may a reply be to the state of th	DN. timely filed m the mailing date of this communication. IED (35 U.S.C. § 133).				
Status							
1)∏ F	Responsive to communication(s) filed on 1	6 March 2005					
· —		This action is non-final.					
/	·—		rosecution as to the merits is				
• —	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
	·						
Disposition of Claims  4) \( \sigma \). Claim(s) 1.75 is/are pending in the application.							
•	Claim(s) <u>1-75</u> is/are pending in the application.  4a) Of the above claim(s) <u>1-44 and 49-75</u> is/are withdrawn from consideration.						
	i) Claim(s) is/are allowed.						
·	☐ Claim(s) is/are allowed.  ☐ Claim(s) 45-48 is/are rejected.						
·	Claim(s) <u>43-46</u> is/are rejected.  Claim(s) is/are objected to.						
·	Claim(s) are subject to restriction ar	nd/or election requirement.					
•		, and a second to quit and a second	·				
Applicatio —	•						
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority un	der 35 U.S.C. § 119						
a)	cknowledgment is made of a claim for fore All b) Some * c) None of: Certified copies of the priority docume Copies of the certified copies of the priority docume Copies of the certified copies of the papplication from the International Buse the attached detailed Office action for a	nents have been received. nents have been received in Applica priority documents have been receive reau (PCT Rule 17.2(a)).	ntion No ved in this National Stage				
2) Notice 3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB						

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This application is a CON of 10/405308 (filed 4/2/2003, ABN) which is a DIV of 09/745396 (filed 12/21/2000, US Patent #5508203) which claims benefit of Provisional Application 60/173063 (12/24/1999).

## Election/Restrictions

1. Applicant's election with traverse of group II, claims 45-48, in the reply filed on 3/16/2005, is acknowledged. The traversal is not found persuasive because no grounds of traversal were stated.

The requirement is still deemed proper and is therefore made FINAL.

- 2. Claims 1-44 and 49-75 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 3/16/2005.
- 3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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4. This application contains claims 1-44 and 49-75 drawn to an invention nonelected with traverse in Paper No. dated 3/16/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 45-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The instant specification does not adequately describe the nexus between the modulation of the estrogen receptor and a useful treatment of a disease/condition. Modulation of a receptor involves antagonism, inhibition, agonism and others. These modulations are sometimes opposite reactions to the same receptor. It is not seen where the instant specification adequately describes the nexus between the modulation of the estrogen receptor and a useful treatment of a single disease or condition.

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3. Claims 45-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is "undue". These factors include 1) the breadth of the claims, 2) the nature of the invention, 3) the state of the prior art, 4) the level of one of ordinary skill, 5) the level of predictability in the art, 6) the amount of direction provided by the inventor, 7) the existence of working examples, and 8) the quantity of experimentation needed to make or use the invention based on the content of the disclosure. In re Wands, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

- 1) The breadth of the claims,
- 2) The nature of the invention,
- 3) The state of the prior art,
- 4) The level of one of ordinary skill,
- 5) The level of predictability in the art,
- 6) The amount of direction provided by the inventor,
- 7) The existence of working examples,
- 8) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

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**The nature of the invention:** The nature of the invention is the method of treating a disorder that is modulated by the estrogen receptor.

The state of the prior art: The state of the prior art is that it involves screening in vitro and in vivo to determine which compounds exhibit the desired pharmacological activities (i.e. what compounds can treat which specific disease). There is no absolute predictability even in view of the seemingly high level of skill in the art. The existence of these obstacles establishes that the contemporary knowledge in the art would prevent one of ordinary skill in the art from accepting any therapeutic regimen on its face.

The predictability in the art: It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In re Fisher, 427 F. 2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. In the instant case, the instantly claimed invention is highly unpredictable since one skilled in the art would recognize that in regards to the therapeutic effects of all diseases, whether or not the modulation of estrogen receptors would make a difference in the disease. Hence, in the absence of a showing of a nexus between any and all known diseases and the modulation of estrogen receptors, one of ordinary skill in the art is unable to fully predict possible results from the administration of the compound of formula (I) due to the unpredictability of the role of modulation of estrogen receptors.

The presence or absence of working examples: Pages 34-36 of the instant specification describe several assays that would show the instant compounds effecting estrogen receptors. However, the assays are just listed and do not show that any of the instant compounds have this ability to modulate estrogen receptors. Due to this, there are no working examples of the instant compounds modulating estrogen receptors.

The amount of direction or guidance present: The guidance present in the specification is the listing of several assays that could determine if the instant compounds modulate estrogen. However, these assays do not provide a nexus between modulating estrogen receptors and the use treatment of any disease or condition listed in the claims or specification. The specification does not seem to enable a correlation between the mediation of estrogen receptors and the treatment of any and all diseases.

The breadth of the claims: The claims are drawn to the treatment of any and all diseases mediated by the estrogen receptor with the compound of formula 1.

The quantity of experimentation needed: The quantity of experimentation needed is undue. One skilled in the art would need to determine what diseases out of all known diseases would be benefited by the mediation of estrogen receptors and then would further need to determine which of the claimed compounds would provide treatment of the disease.

The level of the skill in the art: The level of skill in the art is high. However, due to the unpredictability in the pharmaceutical art, it is noted that each embodiment of the invention is required to be individually assessed for physiological activity by in vitro

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and in vivo screening to determine which compounds exhibit the desired pharmacological activity and which diseases would benefit from this activity.

Thus, the specification fails to provide sufficient support of the broad use of the compounds of formula 1 for the treatment of any disease. As a result necessitating one of ordinary skill to perform an exhaustive search for which diseases can be treated by which compound of claim 1 in order to practice the claimed invention.

Genentech Inc. v. Novo Nordisk A/S (CA FC) 42 USPQ2d 1001, states that "a patent is not a hunting license. It is not a reward for search, but compensation for its successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the Wands factors and In re Fisher (CCPA 1970) discussed above, to practice the claimed invention herein, one of ordinary skill in the art would have to engage in undue experimentation to test which diseases can be treated by the compounds of the instant claims, with no assurance of success.

This rejection can be overcome by deleting the claims.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 45-48 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhagwat (US Patent #6436923).

Bhagwat teaches compounds such as example 49

Example 49

Synthesis of 2-(4-Fluorophenyl)-1-{4-(2-Piperidylacetamide)Benzyl}-1,2,3,4-Tetrahydroisoquinolin-6-Ol

that are useful to treat diseases that are linked to estrogen.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Margaret Seaman whose telephone number is 571-272-0694. The examiner can normally be reached on 630am-4pm, First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecelia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Margaret Seama Primary Examiner Art Unit 1625

dms